



MONITORING

Watershed Management

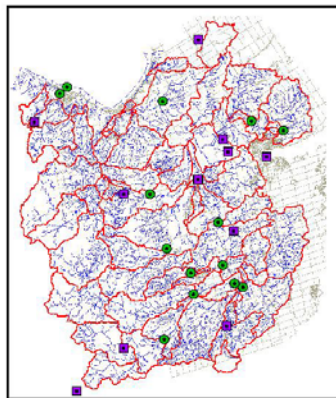
Nottawasaga Valley Watershed Flood Forecasting System

Client: Nottawasaga Valley Conservation Authority

Location: County of Simcoe, Ontario

The Nottawasaga Valley Conservation Authority (NVCA) is a member of the *Greater Toronto Conservation Authorities Flood Forecasting and Warning Committee*. This group has developed a set of standards for flood forecasting and warning which sets out the rationale and recommended minimum standards for Flood Forecasting and Warning. At the end of 2003, the NVCA adopted these minimum standards as part of its Business Plan process.

The **I**ntegrated **S**tormwater and **W**atershed **M**anagement **S**ystem (**ISWMS™**) is a tool designed to help watershed and drainage system managers cope with multiple, linked and often competing water resources objectives at different geographical scales. The software was developed for the NVCA by **GREENLAND**. In 2003, we prepared a flood forecasting model of the 3,500 km² Nottawasaga Valley Watershed after calibration/verification with data collected from a many climate and streamflow monitoring stations, located throughout the basin (see image below).



GREENLAND was also responsible for the installation and data processing of many monitoring stations. The stations included state-of-the-art remote sensing and data acquisition equipment (see images to the right). The ISWMS™ flood forecast model is now functional and being used by the NVCA to determine critical flows during flood events at major flood damage centres.

